



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

AW

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,622	12/31/2001	Dennis W. Vance	18590-06192	2497
758	7590	11/20/2003	EXAMINER	
FENWICK & WEST LLP SILICON VALLEY CENTER 801 CALIFORNIA STREET MOUNTAIN VIEW, CA 94041			PRITCHETT, JOSHUA L	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 11/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/039,622	VANCE ET AL.	
	Examiner	Art Unit	AW
	Joshua L Pritchett	2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 7-10, 13, 14, 17-19, 25, 32, 34 and 39-49 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 7-10, 13, 14, 17-19, 25, 32, 34, 39, 40 and 42-49 is/are rejected.
- 7) ☒ Claim(s) 3 and 41 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5 6) ☐ Other: _____

DETAILED ACTION

This action is in response to Amendment C, filed September 15, 2003. Claims 1, 7-9, 25, 32 and 34 have been amended, claims 5-6, 20-24, 26-31, 33 and 35-38 have been cancelled and claims 39-49 have been added as requested by the applicant. The applicant provided no arguments in Amendment C. The arguments from Amendment B filed July 7, 2003 have been considered and discussed below.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the second layer interposed between the incident light and the remaining portion of the beads protruding through the back surface of and not disposed in the first layer of substantially opaque material must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 3 and 41 are objected to because of the following informalities: the claim limitations do not appear in the drawing submitted March 18, 2003. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4, 7-10, 13-14, 17-19, 25, 32, 34 and 39-49 rejected under 35 U.S.C. 103(a) as being unpatentable over Vance (US 5,563,738) in view of Baek (US 6,310,722).

Regarding claims 1, 9 and 48-49, Vance teaches a light filter comprising a first layer (16) of substantially opaque material (col. 3 line 28) including front and back surfaces (Fig. 6A); a plurality of light transmissive beads (14) disposed in a single-layer array within the first layer of opaque material with first portions of the beads penetrating through the front surface of the first layer (Fig. 6A) to form light transmissive apertures and remaining portions of the beads protruding through the back surface of an not disposed within the first layer to receive incident light (Fig. 6A). Vance further teaches a second layer (12). Vance lacks a layer having asymmetrical light dispersion. Baek teaches a second layer (64) having asymmetrical light

Art Unit: 2872

dispersion (col. 5 lines 48-53) characteristics along orthogonal axes, the second layer being disposed relative to the beads and the first layer to disperse light incident on the second layer to enhance light transmission along one of the orthogonal axes relative to light transmission along another of the orthogonal axes. Baek further teaches the second layer including prismatic lenses having surfaces oriented normal to incident light and sloping surface oriented skewed to incident light for dispersing light passing therethrough (Fig. 5). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to equip Vance with the light-dispersing layer of Baek for the purpose of enlarging the viewing angles of the filter.

Regarding claims 2 and 40, Vance teaches the second layer disposed to receive light emanating from the apertures (Fig. 6A).

Regarding claims 4 and 42, Vance teaches a conformal layer (62) of transmissive material affixed to the back surface of the first layer and the remaining portion of the beads to receive incident light (Fig. 10B).

Regarding claim 7, Vance teaches the invention as claimed but lacks the light-dispersing layer. Baek teaches the sloping surfaces include multiple facets at different sloping angles (Figs. 6C-F). A circle has infinite facets and slope changes. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to equip Vance with the light-dispersing layer of Baek for the purpose of enlarging the viewing angles of the filter.

Regarding claim 8, Vance teaches the invention as claimed but lacks the light-dispersing layer. Baek teaches the sloping surfaces adjacent the surfaces normal to incident light slip at different angles (Figs. 6C-F). It would have been obvious to a person of ordinary skill in the art

Art Unit: 2872

at the time the invention was made to equip Vance with the light-dispersing layer of Baek for the purpose of enlarging the viewing angles of the filter.

Regarding claim 10, Vance teaches the invention as claimed but lacks the light-dispersing layer. Baek teaches the prism layer is a film (Fig. 5). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to equip Vance with the light-dispersing layer of Baek for the purpose of enlarging the viewing angles of the filter.

Regarding claims 13 and 43, Vance teaches the beads have a radius R , and a thickness of the conformal layer is not greater than R (Fig. 10B).

Regarding claims 14 and 44, Vance teaches the beads have a radius R , and the thickness of the conformal layer is about 10% of R (Fig. 10B).

Regarding claims 17, 32 and 34, Vance teaches the invention as claimed but lacks the light-dispersing layer. Baek teaches the second layer includes a material for scattering light (col. 6 lines 34-35). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to equip Vance with the light-dispersing layer of Baek for the purpose of enlarging the viewing angles of the filter.

Regarding claims 18 and 45, Vance teaches a support layer of transparent material disposed intermediate the beads and the second layer (Fig. 8).

Regarding claims 19 and 46, Vance teaches a support layer of transparent material disposed relative to the beads and the second layer (Fig. 8).

Regarding claims 25 and 47, Vance teaches a thin transparent layer disposed between the first layer and the second layer, the beads penetrating the first layer (82) and the thin transparent layer (10) to form apertures of increased diameter (Fig. 8).

Response to Arguments

Applicant's arguments with respect to claims 5-10 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed July 7, 2003 have been fully considered but they are not persuasive.

On page 17 of Amendment B, applicant argues that Vance does not teach the newly added subject matter regarding asymmetrical light dispersion. The examiner provided an additional reference, Baek, which teaches the newly added subject matter and all the remaining claims with the exception of claims 3 and 41 are rejected under 35 U.S.C 103(a) by Vance in view of Baek. Baek teaches the use of asymmetric light dispersion as discussed in the rejection of claims 1, 9 and 48-49.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

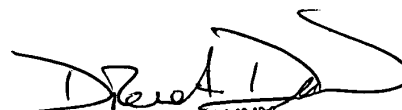
Art Unit: 2872

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua L Pritchett whose telephone number is 703-305-7917. The examiner can normally be reached on Monday - Friday 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew A Dunn can be reached on 703-305-0024. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

JLP
JP
DREW DUNN
SUPERVISORY PATENT EXAMINER